AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A method for providing a variable bit rate for a streaming service in an information communication system, comprising the steps of:

a) decomposing a stored original video bit stream into a plurality of files of a plurality of file types ~~capable of supporting the variable bit rate~~, and then storing the files, wherein each of the plurality of file types is defined by at least a picture type of a frame and a discrete cosine transform (DCT) coefficient group;

b) merging selective files of the plurality of files and selective frames ~~to form a frame~~ based on the decomposed file types by considering a traffic state of a communication network; and

c) providing the streaming service by using the video bit stream merged.

2.   (Original) The method as recited in claim 1, wherein the step a) decomposing the original video bit stream is gained by applying a frame rate controlling system through a frame removal and a fidelity controlling system in which selection ranges for a discrete cosine transform (DCT) coefficient are differently provided in a unit of a block within a frame.

3.   (Currently Amended) The method as recited in claim 1, wherein the step a) includes the steps of:

a1) reading a bit column of a bit stream in a video data file stored at an original video storage;

a2) storing the bit column in case that the bit column is header information, after that, re-executing from the step a1);

a3) checking ~~a~~ the picture type of the frame into which the bit column is contained in case that the bit column is data information;

a4) classifying the picture type into each of I picture type, P picture type and B picture according to the checking result of the step a3); and

a5) determining respective files on the bases of a group into which the DCT coefficient of the bit column is contained according to each picture type, and storing the bit column at the file of the group into which the DCT coefficient of the bit column contained.

4.   (Original) The method as recited in claim 3, wherein the bit column of the step a2) is stored at the file of the I picture type at which minimum information capable of reproducing the original video bit stream is stored.

5.   (Currently Amended) The method as recited in claim 1, wherein said step b) includes the steps of:

b1) reading the files stored in the step a);

b2) storing the file as a bit stream file in case that the file is a sequence end code, and checking whether or not the file is a picture start code in case that the file is not the sequence end code;

b3) checking whether or not the file is a sequence start code, in case that the file is not the picture start code in the checking result of said step b2);

b4) recording sequence header information at a generation bit stream in case that the file is the sequence start code in the checking result of said step b3), and re-executing from said step b1);

b5) deciding a quality of service in the communication network to which the bit stream is transmitted, in case that the file is not the sequence start code in the checking result of said step b3), and selecting a transmittable frame type and a the DCT coefficient group; and

b6) generating the bit stream for the bit column contained into the picture type and the DCT coefficient group which are selected in said step b5), in case that the file is the picture start code in the checking result of said step b3).

6.   (Original) The method as recited in claim 5, wherein said step b6) includes:

b6-1) checking whether there is a change in the quality of service of the communication network to which the bit stream is transmitted, in case that a granularity is 10;

b6-2) selecting the picture type and the DCT coefficient group corresponding to such a case that there is the change in the quality of service, after that, recording the header information, and re-executing from said step b1); and

b6-3) recording the header information in case that there is no the change in the quality of service or the granularity is not 10, and re-executing from said step b1).

7. (Currently Amended) A computer readable record medium storing instructions for executing a method for providing a variable bit rate for a streaming service in an information communication system, the method comprising the steps of:

a) decomposing a stored original video bit stream into a plurality of files of a plurality of file types ~~capable of supporting the variable bit rate~~, and then storing the files, <u>wherein each of the plurality of file types is defined by at least a picture type of a frame and a discrete cosine transform (DCT) coefficient group</u>;

b) merging selective files of the plurality of files ~~to form a frame~~<u>and selective frames</u> based on the decomposed file types by considering a traffic state of a communication network; and

c) providing the streaming service by using the video bit stream merged.